Summary of Cancer Incidence and Mortality for Zip Code 29125 (Pinewood, SC)

Cancer Incidence in Zip Code 29125

The first step in the analysis of cancer data for zip code 29125 was to look at the number of new cancer cases diagnosed in zip code 29125 and compare this to the number of cancer cases expected (see Table 1). This first step determines if there is anything unusual in the observed cancer patterns in the area. The number of "expected" cancer cases is calculated by using national cancer rates and applying them to the population of the zip code.

Table 1 shows what types of cancer occurred in zip code 29125 from 1996 through 1999, and how many cases of each type of cancer were expected. Overall, there were significantly fewer cases of cancer than expected, which is encouraging news. A total of 48 cases of cancer occurred in the zip code, while 78 cases were expected. The most common types of cancer were female breast, prostate, lung and colorectal cancers. These four types of cancer are also the most common cancers occurring across all of South Carolina. Statistical tests did not reveal any cancer types that were significantly higher than expected.

Cancer Deaths in Zip Codes 29125

To assess cancer deaths in this zip code, cancer mortality data from 1996 through 2000 was used. This is the most current death data available. The same process used to analyze new cancer cases was also used to analyze cancer deaths. Table 2 shows the number of cancer deaths that occurred and the number of cancer deaths expected in the zip code. A total of 29 cancer deaths occurred in this zip code, while 44 deaths were expected. Therefore, there were significantly fewer cancer deaths than expected.

The analysis did not reveal any specific cancer sites where the number of deaths occurring was significantly higher than expected.

Conclusions

To summarize, there were significantly fewer cancer cases and deaths than expected in zip code 29125. Overall, we do not see any evidence of cancer clustering or of cancers resulting from environmental exposures. A cancer cluster exists when the number of cancers that occurs is more than would be expected by chance. A cancer cluster is more likely to involve rarer cancers, such as brain, rather than more common cancers, like breast or prostate. Also, a cancer cluster would occur with one specific type of cancer rather than having excesses in many different types of cancer.

It is unfortunate that cancer is such a common occurrence. Statistics now show that 1 in 2 men and 1 in 3 women will develop cancer at some point in their lives.

For questions about this report, please contact Laura Sanders at the SC Central Cancer Registry.

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Information on cancer incidence provided by the SC Central Cancer Registry, Office of Public Health Statistics and Information Services, SC Dept. of Health and Environmental Control.

Information on cancer mortality provided by the Division of Biostatistics, Office of Public Health Statistics and Information Services, SC Dept. of Health and Environmental Control.

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Table 1. Analysis of New Cancer Cases in Zip Code 29125, 1996-1999

Cancer Site	Observed No. of Cases	Expected No. of Cases	Observed/Expected	Chi-SquareTest*
Breast (Female)	8	6.6	1.21	0.28
Prostate	8	12.2	0.66	1.44
Lung/Bronchus	7	11.2	0.63	1.55
Colon/Rectum	4	9.3	0.43	3.01
Unknown/III-Defined	1	NA	NA	NA
All Sites	48	78.3	0.61	11.73

NA = "Not Available"

Excludes in situ cases of cancer to allow for comparison.

Cancer sites with less than 5 cases expected are not analyzed due to the unreliability of statistical tests based on small numbers.

*The Chi-Square Statistical Test allows us to determine if the difference between what is observed and what is expected is significant. If the value is greater than 3.84, then we are 95% confident that the observed number of cases is significantly different from the expected number of cases.

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Table 2. Analysis of Cancer Deaths in Zip Code 29125, 1996-2000

Cancer Site	Observed No. of Deaths	Expected No. of Deaths	Observed/Expected	Chi-SquareTest*
Lung/Bronchus	8	12.3	0.65	1.52
Colon/Rectum	5	4.7	1.06	0.02
All Sites	29	43.8	0.66	5.00

NA = "Not Available"

Cancer sites with less than 5 deaths expected are not analyzed due to the known unreliability of statistical tests based on small numbers.

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^{*}The Chi-Square Statistical Test allows us to determine if the difference between what is observed and what is expected is significant. If the value is greater than 3.84, then we are 95% confident that the observed number of deaths is significantly different from the expected number of deaths.